



PATENT

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The Clerk
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Khuy V. Nguyen, et al

Docket No. 2000-104

Application No.: 09/546,262

Group No.: 1745

Filed: April 10, 2000

Examiner:

For: SHUTDOWN BATTERY SEPARATOR MADE WITH
A BLEND OF POLYMER AND OLIGOMER

**PRELIMINARY AMENDMENT AND
INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents
Washington, DC 20231

Dear Sir:

This Preliminary Amendment is being filed with the Information
Disclosure Statement.

Attached are:

- 1) Form PTO/SB/08A; and
- 2) the reference listed thereon.

Kindly amend this application, without prejudice, as follows:

I hereby certify that this correspondence is being
deposited with the United States Postal Service as
first class mail in an envelope addressed to:
Assistant Commissioner For Patents
Washington, DC 20231, on June 27, 2000
(Date of Deposit)

Janice B. Davis
Signature

-- 1. (Amended) A battery separator comprising:

A1
a microporous polyolefinic membrane having a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a polyolefin polymer, and an oligomer of a polyolefinic polymer, and said oligomer comprising at least 15% by weight of said blend.

2. (Amended) A battery separator comprising

a microporous polyolefinic membrane having a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a C₁ - C₇ based polymer and a C₁ - C₇ based oligomer, and said oligomer comprising at least 15% by weight of said blend.

A2
9. (Amended) A battery separator for a lithium rechargeable

battery comprising a microporous polyolefinic membrane having a shutdown temperature of less than about 130°C, a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a high density polyethylene polymer and a polyethylene wax having a molecular weight less than 6000, and said wax comprising at least 15% of said blend.--

Remarks

Consideration and allowance of this application are respectfully requested in light of the foregoing amendments and the following remarks.

Attached hereto please find Form PTO/SB/08A and a copy of the reference cited therein. Japanese Published Patent Application No. 8-20659 is directed to a microporous membrane used as a separator for a nonaqueous electrolyte cell having a blend of polyethylene and polyethylene wax.

Kindly consider and make same of record in the instant application.

In view of the above, an early notice of allowance is respectfully requested.

Respectfully submitted,



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